



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,170	03/17/2004	Kimihiro Kikuchi	9281-4767	3840
7590 06/29/2007				
Brinks Hofer Gilson & Lione				
P.O. Box 10395				
Chicago, IL 60610				
		EXAMINER		
		LAZORCIK, JASON L		
		ART UNIT		
		PAPER NUMBER		
		1731		
		MAIL DATE		
		DELIVERY MODE		
		06/29/2007		
		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/802,170

Applicant(s)

KIKUCHI, KIMIHIRO

Examiner

Jason L. Lazorcik

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 first recites providing "an initial volume" and "a surplus volume" of optical material in lines 5-6. Applicant continues to refer to the initial and surplus volumes as separate and distinct elements through the heating and press forming operations. Applicant then proceeds to drop the distinction between the initial and surplus volumes of optical material teaching a step of "applying a pressing force to optical material to cause the optical material to expand outwardly". Applicant then resurrects the distinction between the initial and surplus volumes as separate and distinct volume elements by indicating "the deformable portion is configured to receive the surplus volume of the optical material".

First, Claim 1 recites the limitation "the optical element material" in line 14. There is insufficient antecedent basis for this limitation in the claim. Specifically, it is unclear from the current claim language if Applicant intends to here refer to "the initial volume of optical element material", the "surplus volume of the optical element material", or neither of these elements.

Second, since Applicant appears to teach that the initial and surplus volumes of optical material are united into a single "optical element" in lines 13-14, it is unclear how

Art Unit: 1731

Applicant can then require that the deformable portion be configured to receive only "the surplus volume of the optical element material".

Since Applicant has failed to clearly set forth the intended boundaries of the claimed initial and surplus volumes of optical material, the particular metes and bounds for which Applicant seeks patent protection are necessarily rendered unclear and indefinite. With respect to the following Office Action and in accord with Office practice, the terms at issue are afforded their broadest reasonable meaning.

Claim Rejections - 35 USC § 102

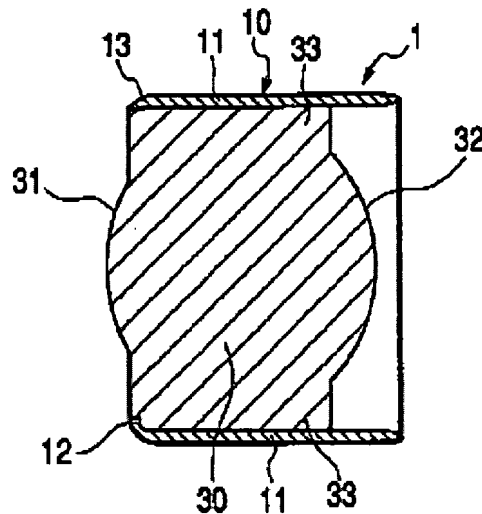
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Otsuki (US 2002/0184919 A1). Basis for the following rejection can be found in the instant reference paragraphs ¶ [0007]-[0010] and particularly ¶ [0047] – [0056] in addition to figures 1A, 1B, and 4 (see figure 4 excerpt below).

FIG. 4



With respect to Claim 1, Otsuki teaches a cylindrical holder material (11) having a thin deformable portion (13) where a side portion of the holder material is made thin (**Claim 4**) and which is an inside portion of the deformable portion (13) is deformed outwardly when the optical element material is placed under pressure. This thin deformable portion (13) likewise reads upon the claimed "thin collar portion" of the cylindrical holder material where "a thin collar portion is formed on an inner circumferential side of the holder" (**Claim 5**).

According to the reference, this cylindrical holder material is disposed in a press forming die, an optical element material (20) is placed inside said holder and thereafter both are heated (§0053) to a softening temperature of the optical material. For reasons further discussed below, it is the Examiners understanding, absent any compelling and substantially unexpected results to the contrary, that the optical element material (20) comprises the claimed "initial volume of optical element material" and "the surplus

Art Unit: 1731

volume of optical element material". Since the optical element material (20) is placed inside the holder, it follows that the initial volume and the surplus volume of optical material were "previously added" together to form the optical element material (20) **(Claim 3)**.

Upon pressing the heated optical material in a pressing mold, the metal ring (10), which is also understood to be in a deformable state or at "a softening temperature", deforms outwardly due to the pressure generated upon the optical material by the impinging mold elements. To this end Otsuki explicitly states that, "the pressure arising from the softened pellet is exerted on the metal ring to expand it...and, the thin-wall portion (13) is deformed easily and the holding portion 15 is deformed easily as a whole" (¶ 0054). The instant disclosure reads directly on Applicants claimed step of deforming the deformed portion (13) of the holder (11) towards the outside thereof by a pressing force applied by the optical material.

The expansion or deformation of the metal ring is here asserted to be implicitly due, at least in-part, to an excess amount of optical material or "a surplus" to the volume required for formation of the optical element **(Claim 3)**. It therefore follows that the deformable portion is "configured" to receive the surplus volume of the optical material and that molding pressures generate an internal force upon the excessive volume of optical material which results in the outward radial expansion of the metal ring and the deformation of "the deformable portion".

Otsuki concludes by teaching that the metal ring is adhered strongly to the lens through the pressing operation thereby "integrating the optical element inside the cylindrical holder" (§0055). The holder-mounted optical element which results from the Otsuki process is understood to generate "reference surfaces in an optical axis direction (12) and in the radial direction (10) as depicted in figure 4 above (**Claim 2**).

Response to Arguments

Applicant's arguments, see page 5, filed April 30, 2007, with respect to the non-statutory double patenting rejection have been fully considered and are persuasive. The double patenting rejection of claims 1-5 has been withdrawn.

Applicant's arguments filed April 30, 2007 have been fully considered but they are not persuasive. Applicant argues that "Otsuki does not teach or disclose the feature of the deformable portion configured to receive the surplus volume of the optical material". Examiner strongly disagrees.

Otsuki explicitly teaches that ""the pressure arising from the softened pellet is exerted on the metal ring to expand it...and, the thin-wall portion (13) is deformed easily and the holding portion 15 is deformed easily as a whole" (§ 0054). As indicated above, it is the Examiners position that the optical element material (20) of the prior art implicitly comprises the claimed "initial volume of optical element material" and "the surplus volume of optical element material". It follows that the deformable portion (13) is

Art Unit: 1731

"configured" to receive the surplus volume of the optical material by outward deformation during the pressing operation and that the resulting optical element comprises a volume of material corresponding the "the initial volume of the optical material.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Although not relied upon in the above rejections of claims 1-5, Angenet (US 4,895,585) teaches the manufacture of a holder-mounted optical element(19) which during molding "the ring" or a cylindrical holder material (3) is expanded radially, deforming "the deformed portion of the holder towards the outside thereof by a pressing force", and resulting in an integrated optical element (Abstract, and figures 1 A,B, and C). Applicant is advised that any response to the instant Office Action should carefully consider the scope of material disclosed by at least these Angenet reference in addition to the Otsuki reference as set forth above.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 1731

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason L. Lazorcik whose telephone number is (571) 272-2217. The examiner can normally be reached on Monday through Friday 8:30 am to 5:00pm.

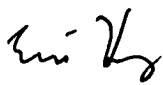
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/802,170
Art Unit: 1731

Page 9

JLL


ERIC HUG
PRIMARY EXAMINER